

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A dumb gateway device for connecting at least one bus system with a common network layer that is designed to build a transparent access network by connecting said at least one bus system via the dumb gateway device to said common network layer, said dumb gateway device comprising:

a bus service interface configured to provide access to all functionality and commands of said at least one bus system via said common network layer to an intelligent gateway connected to said common network layer; and

a stream manager configured to control isochronous streams between said at least one bus system and said common network layer.

Claim 2 (Previously Presented): The dumb gateway device according to claim 1, wherein said bus service interface is able to post bus events on said common network layer in case a device within said respective bus system indicates the possibility to communicate via said common network layer.

Claim 3 (Previously Presented): The dumb gateway device according to claim 1, wherein said bus service interface is usable by a device presenter to communicate with the corresponding real device connected to another bus system.

Claim 4 (Previously Presented): The dumb gateway device according to claim 1, wherein said bus service interface is able to represent a virtual device to its respective bus system based on a corresponding device emulator.

Claim 5 (Previously Presented): The dumb gateway device according to claim 1, wherein said bus service interface communicates via said common network layer according to the Universal Plug and Play protocol set.

Claim 6 (Previously Presented): The dumb gateway device according to claim 1, wherein said intelligent gateway communicates with said dumb gateway device, which respectively connects to a respective bus system that includes at least one physical device, with a common network layer, comprising a static or dynamic possibility to provide at least one device presenter and/or at least one device emulator of at least one physical device to said common network layer.

Claim 7 (Previously Presented): An intelligent gateway for communicating between gateway devices, which respectively connect to a respective bus system, that includes at least one physical device, via a common network layer, comprising:

a static or dynamic possibility to provide at least one device presenter and/or at least one device emulator of at least one physical device to said common network layer; and

an isochronous stream handler adapted to be controlled by said device presenter or said device emulator.

Claim 8 (Previously Presented): An intelligent gateway according to claim 7, wherein a device manager monitors bus events for new devices, which are posted on said common network layer, and finds, loads and assigns corresponding device presenters and/or emulators.

Claim 9 (Previously Presented): An intelligent gateway according to claim 8, wherein said device manager loads device presenters and/or emulators from external sources.

Claim 10 (Previously Presented): An intelligent gateway according to claim 7, further comprising:

a device presenter configured to present a real device on a bus system as a generic abstract device or service,

wherein said generic abstract device or service presentation is a presentation according to the Universal Plug and Play protocol set.

Claim 11 (Previously Presented): An intelligent gateway according to claim 7, further comprising:

a device emulator configured to emulate a device on a bus system based on a generic abstract device or service presentation.

Claim 12 (Cancelled).

Claim 13 (Previously Presented): A transparent access network that integrates at least two bus systems, each of which comprises a respective gateway device according to claim 1, comprising:

at least one intelligent gateway for communicating between gateway devices, which respectively connect to a respective bus system, said at least one gateway including at least one physical device, via a common network layer including a static or dynamic possibility to provide at least one device presenter and/or at least one device emulator of at least one physical device to said common network layer, and

said common network layer being connected to the respective gateways and said at least one intelligent gateway.

Claim 14 (Previously Presented): The intelligent gateway according to claim 7, wherein said intelligent gateway and said gateway devices are connected by a non-IP based connection.

Claim 15 (Previously Presented): A system comprising:
a first device connected to a first gateway via a first bus system;
a second device connected to a second gateway via a second bus system;
an intelligent gateway connected to said first and second gateways, comprising a first device emulator adapted to emulate said first device on said second bus system, and a second device emulator adapted to emulate said second device on said first bus system; and
an isochronous stream handler, which is controller by said first device emulator or said second device emulator.

Claim 16 (Previously Presented): The system according to claim 15, wherein said first and second bus systems are not IP based.

Claim 17 (Previously Presented): A dumb gateway device, comprising:
a connection with a bus system;
a bus service interface adapted to connect said bus system with a common network layer that is designed to build a superior network by connecting at least one further bus system via at least one further dumb gateway device to said common network layer, said bus service interface being further adapted to access all functionality and commands of said further bus system via said common network layer; and

an isochronous stream handler adapted to handle streaming operations, said streaming operations being controlled by the bus service interface via said functionality and commands.